7. (Canceled).

12.-20. (Canceled)

21. (New) The method of claim 1 wherein the method is provided to substantially prevent physical damage caused by a high energy particle.

22. (New) The method of claim 1 wherein the method is provided to substantially prevent an undesirable influence of a reactive species from the plasma source.

REMARKS

Claims 12-20 have been cancelled without prejudice for renewal in a related application.

Claims 1-11 are rejected under 35 U.S.C. §112 second paragraph as being indefinite. As noted above, these claims have been amended. The rejection should now be moot. Claim 7 is rejected to under 37 CFR 1.75 as being substantial duplicate of claim 6. Applicants have cancelled claim 7. Accordingly, the rejection to claim 7 is also moot.

Claim 8 was rejected under 35 U.S.C. §112 first paragraph as not containing subject matter in the specification. For now, the claim has been cancelled, rendering the rejection moot. Applicant would like to add this claim back in without prejudice in a related application.

Claims 1-9 and 11 are rejected under 35 USC §102 (b) as being anticipated by Moslehi (USP 5,089,441). Moslehi is directed to a conventional method, which is no more relevant than the prior art disclosed in the applications background of invention. Moslehi taught a plasma process using an oxygen bearing species. Clearly, Fig. 1 reference numeral 20 clearly shows the use of "O_2" which refers to oxygen. Moslehi fails to teach the claimed combination of elements including generating a plasma discharge including a gas-C. The gas-C comprises a Gas-A molecule containing essentially hydrogen as an element and a Gas-B containing essentially a halogen and/or a halide. More particularly, Moslehi fails to teach that the plasma discharge is substantially free from an oxygen bearing species. Rather, Moslehi teaches the opposite, which is the use of the oxygen bearing species. Accordingly, claims 1, 2, 3, 5, and 6, are patentable under 35 USC §102 (b).

Claim 10 is rejected under 35 U.S.C. §103 as being unpatentable over Moshehi (USP 5,089,441) in view of Grill (Cold Plasma in Materials Fabrication). Claim 10 is

patentable upon its base claim for at least the reason noted above. Applicants further assert that Moshehi and Grill fail to show or suggest the invention of claim 10. Here, Moslehi and Grill fail to show the further combination of elements comprising injecting a Gas-D in the downstream of the plasma of Gas-C and setting the object comprising a surface in downstream position of the Gas-D injection, where the Gas D is a gas containing carbon. Applicants note that it is not the specific use of the gas containing carbon. Rather, the invention is the claimed method of injecting a Gas-D in the downstream of the plasma of Gas-C and setting the object comprising a surface in downstream position of the Gas-D injection, where the Gas D is a gas containing carbon. Such method is simply not shown or suggested by the cited references. Accordingly, claim 10 is patentable under 35 U.SC. §103.

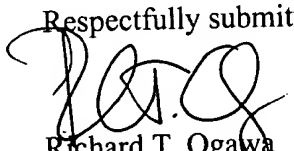
The other dependent claims are also patentable for at least these reason and others. The dependent claims are also patentable upon at least the independent claims. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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Version with markings to show changes made

IN THE SPECIFICATION

Paragraph beginning at line 1 page 4 has been amended as follows:

"[Figs. 2-6 are process diagrams according to embodiments of the present invention; and

Figs. 7 and 8 are plasma treatment tools according to embodiments of the present invention.]"--Fig. 2 is a simplified diagram of a concentraton plotted against flow rate according to an embodiment of the present invention;

Fig. 3 is a simplified diagram of a concentraton plotted against flow rate according to an alternative embodiment of the present invention;

Fig. 4 is a simplified diagram of a concentraton plotted against flow rate according to an alternative embodiment of the present invention;

Fig. 5 is a simplified diagram of a concentraton plotted against flow rate according to an alternative embodiment of the present invention;

Fig. 6 is a simplified diagram of a concentraton plotted against flow rate according to an alternative embodiment of the present invention;

Fig. 7 is a simplified diagram of a plasma processing tool according to an embodiment of the present invention; and

Fig. 8 is a simplified diagram of a plasma processing tool according to an alternative embodiment of the present invention. --

IN THE CLAIMS

4. A method of **[material]** surface treatment in a substantially downstream position of a plasma source, where an object to be processed is downstream from the plasma source, the method comprising generating a plasma discharge including a gas-C, the gas-C comprising a Gas-A molecule containing essentially hydrogen as an element and a Gas-B containing essentially a halogen and/or a halide; wherein said plasma discharge is substantially free from an oxygen bearing species.

5. The method of claim 1 further comprising injecting a Gas-D in the downstream of the plasma of Gas-C **[and setting] [objective]** to treat the object comprising a surface in a downstream position of the Gas-D injection.

6. The method of claim 1, wherein using the gas B is selected from **[molecule and/or compound of]** chlorine, bromine and/or iodine**[as Gas-B]**.

4. (Canceled)

5. The method of claim **[4]** 3, wherein **[using the molecule and/or compound of chlorine, bromine and/or iodine as]** Gas-B does not contain**[ing]** an oxygen atom.

6. The method of claim **[5]** 1, wherein the Gas B is selected from **[using the molecule of]** chlorine, hydrogen chloride, bromine, or hydrogen bromide**[as Gas-B]**.

7. (Canceled).

8. The method of claim 6, wherein the flow rate of the molecule of hydrogen-chloride or hydrogen-bromide as Gas-B in total Gas-C flow is defined as the ratio of amount of hydrogen atom in Gas-B to that in Gas-A is larger than 1/480.

9. The method of claim 2, wherein gas containing silicon as its element is used as Gas-D.

10. The method of claim 2, wherein gas containing carbon as its element is used as Gas-D.

11. The method of claim 2, wherein gas containing fluorine as its element is used as Gas-D.

21. (New) The method of claim 1 wherein the method is provided to substantially prevent physical damage caused by a high energy particle.

22. (New) The method of claim 1 wherein the method is provided to substantially prevent an undesirable influence of a reactive species from the plasma source.